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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,107	10/06/2003	Sung Uk Moon	243563US90	1076
22850	7590	06/01/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			FOTAKIS, ARISTOCRATIS	
		ART UNIT	PAPER NUMBER	
		2611		
		NOTIFICATION DATE		DELIVERY MODE
		06/01/2009		ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/678,107	Applicant(s) MOON ET AL.
	Examiner ARISTOCRATIS FOTAKIS	Art Unit 2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04/20/2009.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 - 2 and 4 - 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1 - 2 and 4 - 9 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/OS/02/06)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claim limitation of "**a second radio station configured to carry out the multicast communication with a second mobile station belonging to the specific multicast group**" must be shown or the feature(s) canceled from the claim(s) (*Please see more below on the Response to Arguments*). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 – 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended/added limitation "*the first radio station comprises: a communication quality acquirer....acquire a communication quality of a signal transmitted from the second radio station to the second mobile station*" in lines 11 - 15 is not described anywhere in the specification (*Please see more below on the Response to Arguments*).

Claims 1 – 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims were amended to recite the limitations of “*a second radio station configured to carry out the multicast communication with a second mobile station belonging to the specific multicast group.*” In lines 5 – 6 and “*the first radio station comprises: a communication quality acquirer configured to acquire the communication quality from the first mobile belonging to the specific multicast group, acquire a communication quality of a signal transmitted from the second radio station to the second mobile station belonging to the specific multicast group, and select the lowest communication quality from among the acquired communication qualities*” in lines 11 – 15 of claim 1. By reviewing the specification, Fig.2 shows a communication system for carrying out multicast communications. It shows a first radio station 100a configured to carry out multicast communication with a first mobile station 200a belonging to a specific multicast group and a second radio station 100b configured to carry out the multicast communication with a second mobile station 200b belonging to another specific multicast group. According to applicant’s disclosure, radio station comprises of a communication acquirer configured to acquire the communication quality from the first mobile belonging to the specific multicast group and any other mobile stations belonging to the specific multicast group or any mobile stations joining the specific multicast group. The specification does not provide any disclosure of the communication quality acquirer of the first radio station acquiring a **communication quality of a signal transmitted from the second radio station to the second mobile station** belonging to the specific multicast group. There was no guidance in the specification to allow of one of skill in the

art to understand why would the communication quality acquirer of the first radio station would need the quality feedback information of a signal transmitted from the second radio station to the second mobile station when the second mobile station is joining the specific multicast group of the first radio station. Shouldn't the first radio station acquire a communication quality of a signal transmitted from the first radio station to the second mobile station belonging to the specific multicast group? Therefore, it would be unpredictable to practice Applicant's claimed invention and therefore require an undue amount of experimentation to make and use the claimed invention (Please see more below on the Response to Arguments).

Response to Arguments

Applicant's arguments filed April 20, 2009 have been fully considered but they are not persuasive.

Applicants submit that Figures 1 and 2 and the specification disclose and show of "a second radio station configured to carry out the multicast communication with a second mobile station belonging to **the specific multicast group**".

Examiner submits that multicast communication is carried by a radio station and a plurality of mobile stations (as defined in Paragraph 0003 of the Application). Therefore, radio station 100a and mobile station 200a carry out multicast communication and the mobile station belongs to a first multicast group. Radio station 100d and mobile station

200f carry out another multicast communication and the mobile station 200f belongs to a second multicast group. The figures only show *a second mobile station belonging to a different multicast group.*

Applicants submit that the disclosure is enabled and recites of "*the first radio station comprises: a communication quality acquirer configured to acquire the communication quality from the first mobile station each of the plurality of mobile stations belonging to the specific multicast group, acquire a communication quality of a signal transmitted from the second radio station to the second mobile station belonging to the specific multicast group*".

Examiner submits that the specification and the figures only show of the **first** radio station comprising a communication quality acquirer configured to acquire the communication quality from the **first** mobile station each of the plurality of mobile stations belonging to the specific multicast group. The specific multicast group as discussed is a first multicast group that carry out multicast communications between the first radio station and the first mobile station. A second multicast group would carry out multicast communications between the second radio station and the second mobile station. As discussed before, the specification does not disclose of *the first radio station comprising: a communication quality acquirer configured to acquire the communication quality of a signal transmitted from the second radio station to the second mobile station belonging to the specific multicast group*". Also one of ordinary skilled in the art would have not understood why would the communication quality acquirer of the first

radio station would need the quality feedback information of a signal transmitted from the second radio station to the second mobile station when the second mobile station belongs to a different (second) multicast group or even if it is joining the first multicast group of the first radio station in order to carry out multicast communication for the first multicast group.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARISTOCRATIS FOTAKIS whose telephone number is (571)270-1206. The examiner can normally be reached on Monday - Thursday 6:30 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aristocratis Fotakis/
Examiner, Art Unit 2611

/Chieh M Fan/
Supervisory Patent Examiner, Art Unit 2611